"AMENDMENT TO CLAIMS"

- 1. (currently amended) A semiconductor device <u>assembly</u> comprising:
- a solder mask over a substrate;
- a die;

conductive paths connecting contacts on said die with contacts in said substrate; and

a partially-cured adhesive layer between said die and said solder mask, wherein said partially-cured adhesive layer remains voidless after outgassing from said solder mask and is partially cured at a temperature below about 100° C; and

an encapsulant molded over the die.

- 2. (currently amended) The semiconductor device <u>assembly</u> of claim 1, wherein said partially-cured adhesive layer is at least fifty percent cured at a temperature below about 100°C.
- 3. (currently amended) The semiconductor device <u>assembly</u> of claim 1, <u>further</u> <u>comprising an encapsulant molded over the die, whereby wherein</u> said partially-cured adhesive layer is fully cured at a temperature above about 100°.
- 4. (currently amended) The semiconductor device <u>assembly</u> of claim 1, wherein said <u>partially-cured</u> adhesive layer is partially cured at a temperature between about 20°C and about 50°C higher than the glassy temperature of said adhesive layer.
- 5. (currently amended) The semiconductor device <u>assembly</u> of claim 4, wherein said <u>partially-cured</u> adhesive layer is partially cured at a temperature below about 85°C.
- 6. (currently amended) The semiconductor device <u>assembly</u> claim 5, wherein said <u>partially-cured</u> adhesive layer comprises a material with a glassy temperature between about 5°C and about 20°C.

7. (currently amended) The semiconductor device <u>assembly</u> of claim 6, wherein said <u>partially-cured</u> adhesive layer comprises bismaleimide.

- 8. (currently amended) The semiconductor device <u>assembly</u> of claim 7, wherein said <u>partially-cured</u> adhesive layer consists essentially of bismaleimide.
- 9. (currently amended) The semiconductor device <u>assembly</u> of claim 1, wherein said <u>partially-cured</u> adhesive <u>layer</u> comprises initiators which react at a temperature below about 100°C.

10. (canceled)

- 11. (currently amended) The semiconductor device <u>assembly</u> of claim $\underline{1}$ 10, wherein said contacts are substantially free of contaminants outgassed from said solder mask.
 - 12. (currently amended) A semiconductor device <u>assembly</u> comprising: a solder mask <u>on a substrate</u>;

a die;

electrical contacts on said solder mask substrate and said die, each said contact on said die being wire bonded to a respective said contact on said substrate mask, said electrical contacts being devoid of contamination caused by outgassing from said solder mask; and

a partially-cured an adhesive layer affixing said die to said solder mask, said adhesive layer being partially cured said adhesive layer having been subjected to partial curing at a temperature below about 100°C and at a temperature between about 20°C and about 50°C higher than a glassy temperature of said adhesive layer; and

an encapsulant molded over the die.

13. (canceled)

14. (currently amended) The semiconductor device <u>assembly</u> of claim 13 12, wherein said <u>partially-cured</u> adhesive layer is at least fifty percent cured at a temperature below about 100°C.

- 15. (currently amended) The semiconductor device <u>assembly</u> of claim 12, wherein said <u>partially-cured</u> adhesive layer is cured at a temperature below about 85°C.
- 16. (currently amended) The semiconductor device <u>assembly</u> of claim 15, wherein said <u>partially-cured</u> adhesive layer comprises a material with a glassy temperature between about 5°C and about 20°C.
- 17. (currently amended) The semiconductor device <u>assembly</u> of claim 16, wherein said <u>partially-cured</u> adhesive layer comprises bismaleimide.
- 18. (currently amended) The semiconductor device <u>assembly</u> of claim 17, wherein said <u>partially-cured</u> adhesive layer consists essentially of bismaleimide.
- 19. (currently amended) The semiconductor device <u>assembly</u> of claim 12, wherein said <u>partially-cured</u> adhesive <u>layer</u> comprises initiators which react at a temperature below about 100°C.
- 20. (currently amended) The semiconductor device <u>assembly</u> of claim 12, wherein said contacts remain relatively free of contaminants released by outgassing from the solder mask during a cure process.

Claims 21-30 (canceled)

31. (currently amended) The semiconductor device <u>assembly</u> of claim 1, wherein said <u>partially-cured</u> adhesive layer is partially cured at a temperature below about 100°C.

32. (currently amended) The semiconductor device <u>assembly</u> of claim 12, wherein said <u>partially-cured</u> adhesive layer is partially cured at a temperature between about 20°C and about 50°C higher than a glassy temperature of said adhesive layer and said curing temperature is below about 100°C.

- 33. (new) The semiconductor device assembly of claim 1, wherein the partially-cured adhesive layer is 50% cured.
- 34. (new) The semiconductor device assembly of claim 1, wherein the partially-cured adhesive layer includes a resin bismaleimide.
- 35. (new) The semiconductor device assemblage of claim 12, wherein the partially-cured adhesive layer is 50% cured.
- 36. (new) The semiconductor device assemblage of claim 12, wherein the partially-cured adhesive layer includes a resin bismaleimide.